

REMARKS

Applicants thank the Examiner for considering the references included with the Information Disclosure Statement filed June 24, 2003.

Claims 1-5 have been examined and rejected, and claims 6 and 7 have been withdrawn from consideration.

I. Rejection under 35 U.S.C. § 112, second paragraph

Claim 3 has been rejected under 35 U.S.C. § 112, second paragraph as allegedly being indefinite. Applicants traverse this rejection. The Examiner maintains that claim 1 requires the conductive portions to be in a single layer, and that claim 3 requires the conductive portions (or conductive dots) to be in a separate layer. However, claims 1 and 3 are not limited as the Examiner suggests. Claim 1 requires the low resistance layer to comprise a large number of conductive portions. Claim 3 requires the large number of conductive portions or conductive dots to be at least partially exposed on a surface of the low resistance layer.

An illustrative, non-limiting embodiment is shown in Figs. 3(a) and 3(b). The embodiment shows a dielectric layer 2b having a low resistance layer 2c which comprises a large number of conductive portions 2c1. Also, the large number of conductive portions 2c1 is at least partially exposed on the surface of the low resistance layer 2c.

Since the claim language is not inconsistent and clearly defines the metes and bounds of the claims, Applicants submit that claims 1 and 3 satisfy the requirements of 35 U.S.C. § 112, second paragraph.

II. Rejection under 35 U.S.C. § 102(b)

Claims 1-5 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Suzuki et al., U.S. 5,315,061 (“Suzuki”). Applicants traverse this rejection on the following basis.

Claim 1 relates to an image carrier comprising a dielectric layer having a low resistance layer formed on the outer surface thereof. The Examiner asserts that Fig. 3 of Suzuki teaches an image carrier 30 in which a dielectric layer 32 has a low resistance layer 34 formed on the outer surface thereof. Applicants respectfully disagree.

As described at column 7, lines 7-15, of the reference, the developing roller 20 comprises a conductive cylindrical base 30, and dielectric bodies 32 are affixed to the periphery of the base 30. As a result, as shown in Fig. 4, the outer surface of the roller 20 consists of a “checker board” pattern of the outer surfaces 36 of the dielectric bodies 32 and the exposed surface portions (or conductive portions 34) of the base 30.

Thus, if the Examiner contends that the dielectric bodies 32 correspond to the claimed dielectric layer and that the conductive portions 34 correspond to the claimed low resistance layer, Suzuki does not suggest the features of claim 1. Specifically, the dielectric bodies 32 are formed on an outer surface of the conductive base 30 to form the “checker board” pattern of dielectric bodies 32 and conductive portions 34. As such the dielectric bodies 32 are formed between the conductive portions 34, and thus, Suzuki does not suggest forming a low resistance layer on the outer surface of a dielectric layer.

On the other hand, if the Examiner contends that the combination of dielectric bodies 32 and conductive portions 34 constitute an “outer layer” 32 and 34 that is formed on an outer surface of the conductive cylindrical base 30, the claim still does not read on the cited reference. Specifically, since the “outer layer” 32 and 34 contains dielectric bodies 32 and conductive portions 34, it has a higher resistivity than the conductive base 30, which is formed only of the same material as the conductive portions 34.

Accordingly, under this interpretation, Suzuki would disclose a high resistance layer (or dielectric layer) 32 and 34 formed on an outer surface of a conductive layer 30. However, claim 1 requires a low resistance layer to be formed on an outer surface of dielectric layer.

Thus, under this interpretation, Suzuki teaches structure that is opposite to the claimed structure, and claim 1 is patentable.

III. Rejection under 35 U.S.C. § 102(e)

Claims 1-5 have also been rejected under 35 U.S.C. § 102(e) as being anticipated by Yamaguchi et al., U.S. 6,407,763 (“Yamaguchi”). Applicants traverse this rejection.

As noted above, claim 1 relates to an image carrier comprising a low resistance layer that is formed on an outer surface of a dielectric layer and that has a large number of conductive portions. The Examiner contends that, in Figs. 1 and 30 of Yamaguchi, the substrate 14 (or 16) corresponds to the claimed dielectric layer and that the particles 18 (or 20) correspond to the claimed low resistance layer having conductive portions. Applicants respectfully disagree.

As clearly shown in Fig. 30, the particles 18 and 20 are contained between inner surfaces 206, and the inner surfaces are contained between the substrates 14 and 16. Thus, the particles

18 and 20 are provided between the substrates 14 and 16 (and between the inner surfaces 206) and are not formed on the outer surfaces of the substrates 14 and 16.

Claim 1 also states that charge is transferred between the dielectric layer and a charge controlling means so as to apply charge to or remove charge from the dielectric layer. However, as shown in Fig. 30 of Yamaguchi, a DC voltage is applied between the transparent electrodes 206 and cause the particles 18 or 20 to selectively move between the inner surfaces 206 (col. 13, ll. 1-11). Accordingly, Yamaguchi does not apply charge to or remove charge from the dielectric layer, as recited in claim 1.

Since Yamaguchi does not disclose at least the recitations of claim 1 noted above, claim 1 is patentable over Yamaguchi. Also, dependent claims 2-5 are patentable over Yamaguchi at least by virtue of their dependency.

IV. Rejection under 35 U.S.C. § 103(a)

Claims 4 and 5 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamaguchi and Suzuki. Since claims 4 and 5 depend upon claim 1, and since Suzuki does not cure the deficient teachings of Yamaguchi with regard to claim 1, Applicant submits that claims 4 and 5 would not have been obvious over Yamaguchi and Suzuki.

V. New Claims

New claims 28-38 have been added. Since claim 28 depends from claim 1, Applicants submit that claim 28 is patentable at least by virtue of its dependency. Also, since the prior art does not suggest the electrical resistances in claim 29, Applicants submit that claim 29 is patentable over the prior art and that claim 30 is patentable at least by virtue of its dependence on

claim 29. Further, since claims 31-38 depend singly from claims 2-5, these new claims are patentable by virtue of their dependencies. Applicants submit that no new matter has been added.

VI. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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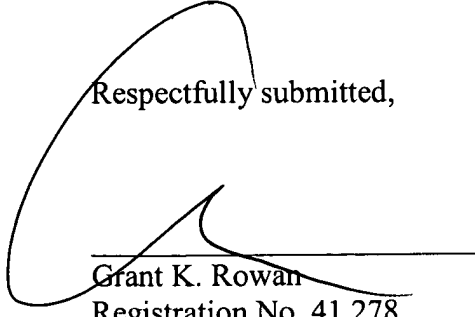
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